GREGG'S
#377
6-23-81
"IMPACT"

## BRICK MAKER

Patented October 22d, 1872.

GUARANTEED PRODUCTION 30,000 PER DAY OF 10 HOURS.

PRODUCING A SUPERIOR ARTICLE OF

Brick from every character of Clay.

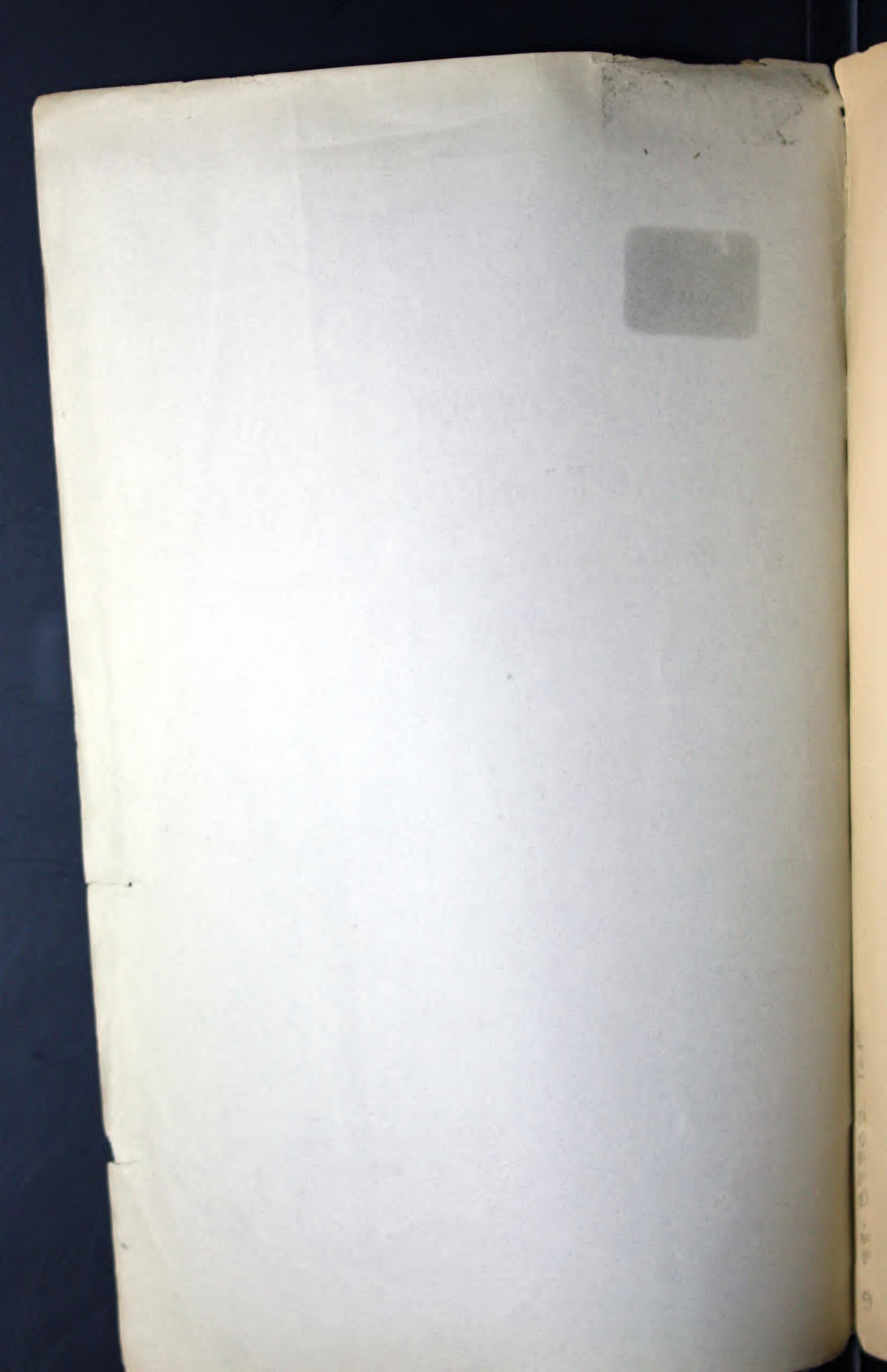
SHOWING WELL DEFINED ANGLES AND EDGES

AND

SMOOTH SURFACE.

PHILADELPHIA:

INQUIRER BOOK AND JOB PRINTING OFFICE, 304 CHESTNUT ST.
1874.



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The strong prejudice existing among hand brickmakers against bricks made by steam machinery will never yield to anything less powerful than the inevitable logic of facts. The numerous failures in the attempts of inventors to produce a good, reliable machine has been a great drawback to much progress in this useful manufacture. Until within a very few years past no machine that has yet been offered to the public has fulfilled the expectations of their inventors or the demands of the occasion.

The proprietors of the Gregg Impact Machine feel confident that the inventor has discovered a principle in compressing clay and forming it into bricks that must, in time, when its great advantages are fully appreciated, be universally adopted. This machine pulverizes and tempers the clay, stamps it into the moulds. sizes the bricks, and presses them, at an average of about 3,000 bricks per hour, at one-half the cost of hand made bricks when they are ready to be moved from the kiln. The quality of brick made by this process must necessarily be superior to any other, for they are less porous, and will stand

more pressure than any other machine made brick, for in the respects named, hand made bricks cannot enter into competition with them at all. In burning, the usual proportion of hard bricks is obtained, and, if the color were only satisfactory, the salmon impact brick would answer as well for an outside wall as ordinary light stretchers, while the arch and hard bricks are superior to any made by any steady pressure machine. The bricks are uniform in thickness, the edges regular and straight, and make a wall which, for beauty and regularity, can only be surpassed by pressed fronts, which can also be made in this machine by a change of moulds without repressing.

The Gregg Impact Machine has worked continuously for eight months, in which time it has made about four million bricks, which bring the highest market prices. In certain respects it has the advantage over any steady pressure machine, for the force used to stamp the clay into the mould will so intimately cement the particles that a very good brick can be made out of very poor clay, while a far superior one can be made out of good clay. A large contract to supply the Centennial building has been made with the party who is using this machine in this city. The Gregg Impact Company are now prepared to negotiate for single machines, County or State

rights. Its practical operation also can be seen.

Below is a description of the general construction of the "Impact" Brick Maker, and in the subsequent pages it will be described minutely in its parts and operations by the cuts. The principal feature is a rotating mould board of thirty-two moulds, divided into eight parts or sections, four moulds firmly bolted together, forming a section. The mould boxes have moveable bottoms, to which are fastened to each from beneath a follower or stem. Crude clay as taken from the bank, without the admixture of water (as previously stated) is broken up between a pair of cone-shaped rollers, the peculiar construction of these rollers casting off the larger stones, and reducing smaller pebbles to silica. The clay reduced in this manner being granulated in form, is now, by means of an elevator of buckets, carried to a hopper, when water is admitted and the clay thoroughly tempered, standing directly over a set

of four moulds, the clay by its gravity descends and fills them; when filled, the mould board or carriage rotates, bringing the charged moulds immediately beneath four stamps or beaters, fitting with precision the mould boxes. These stamps or beaters are elevated a distance of twenty inches, and by one, two or three successive blows, impacts or pounds the clay within the moulds into a solid and compact brick. The four descending stamps being separated, the power is communicated to each brick alike. There is no jar to the machinery while this pounding process is going on, because the followers or stems alluded to, passing directly through the boxes, are made to stand upon an anvil prepared for the purpose, so that the blows are isolated as it were from the body of the Machine. While the stamps are in motion with three blows, another set of moulds is receiving clay, and after leaving the stamps, the mould board moves round, and the stems or followers begin to ascend a circular incline plane, gradually pushing out the bricks to a required distance and bringing them under a sizing knife, cutting off the superfluous or extra clay which was allowed in excess in the moulds, and by this means reducing every one to a uniform thickness. After leaving this knife, the followers then continue to ascend the incline, pushing out the finished bricks, and finally arrive at the summit or level, where they are swept off by an automatic arm on to trays or a traveling belt, and carried away. Seven horse power will drive the Machine, which, when erected, only occupies 9 feet square.

The whole manufacture is simply in five operations, viz.: receiving clay at the hopper, stamping the same, cutting off the excess, repressing, and finally the discharge. While the hopper is charging one set of moulds, the rotating mould board remains stationary, and the stamps or beaters are then in operation at another set previously filled; and when the table rotates to bring another section of moulds in place under the stamps, the stamps by a suitable contrivance are held in suspension, and at the proper time descend to perform their work.

In conclusion, we will remark, that all of the work may be done under cover, thereby saving great loss from rain, incident

to manufacturing out in the open field. In view of the fact that the bricks from this machine are dried by artificial heat, the manufacture can be conducted to the same advantage in winter as in summer.

The attention of those interested in the manufacture of bricks is especially directed to the fact of this Machine being susceptible of producing grades of front or face bricks.

For further particulars address—

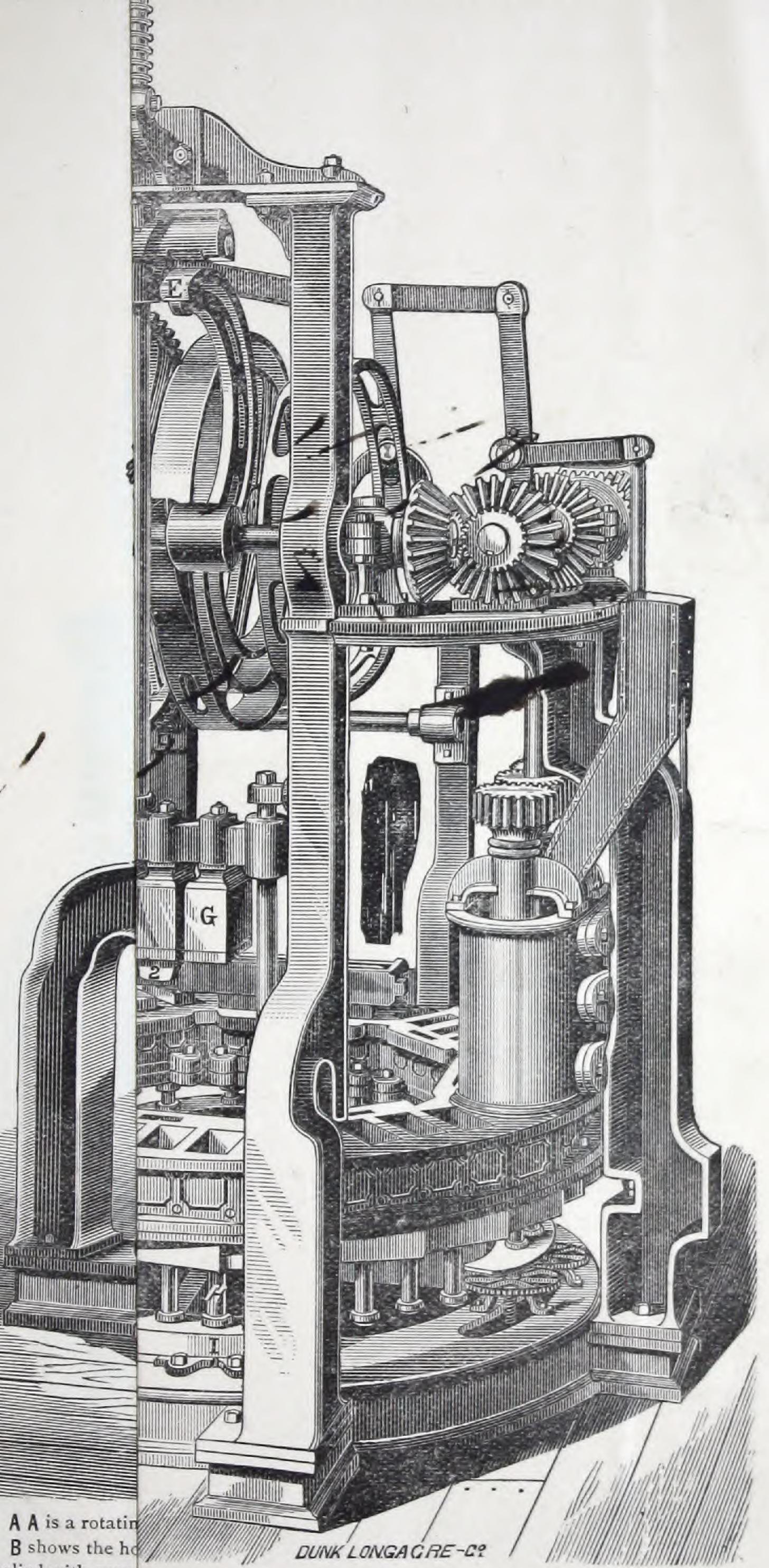
A. B. WELLS, Sec'y and Treas.,

Moor Essechestant Street,

PHILADELPHIA.

Room 3, 2281/2 Walnut Street.





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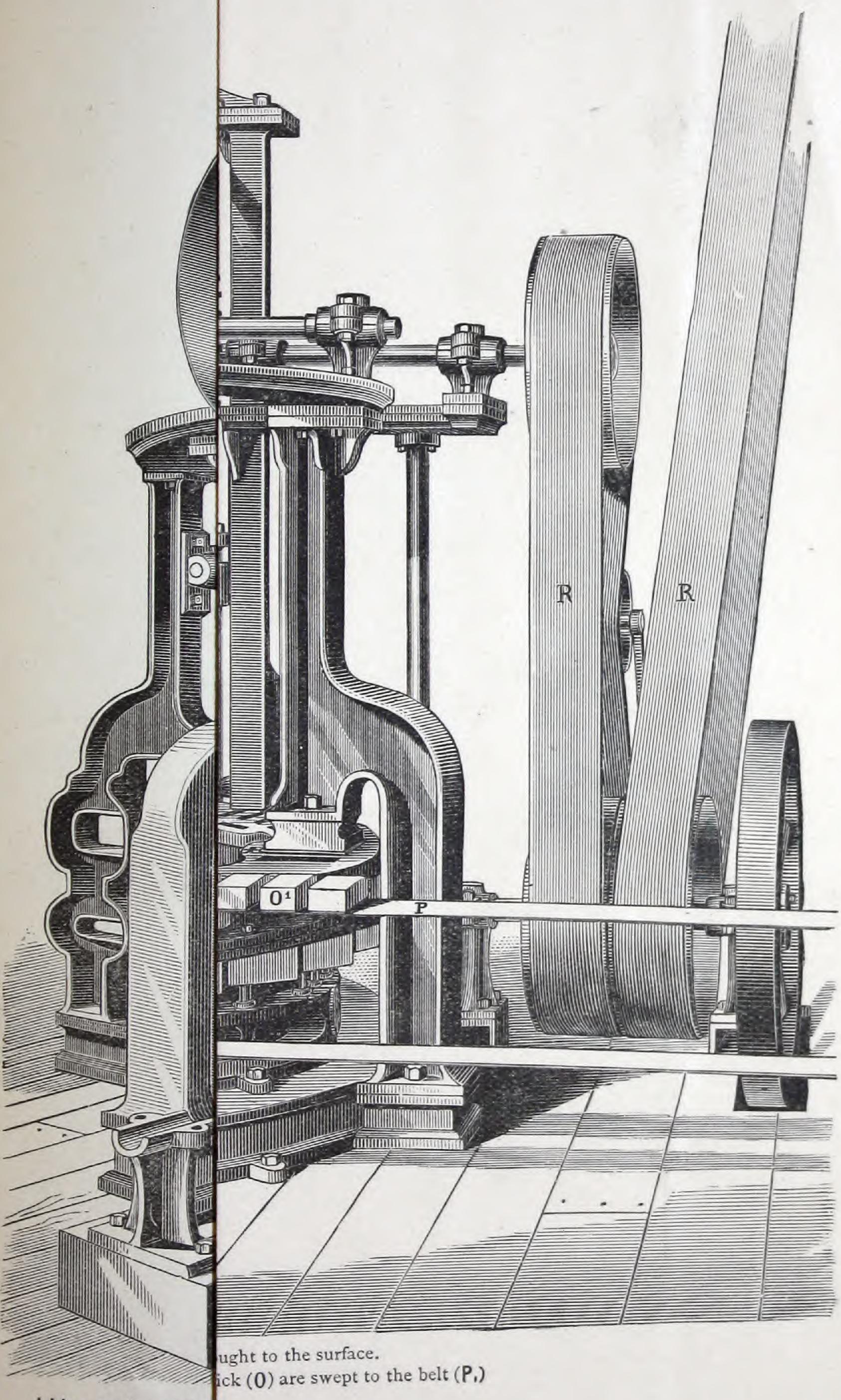
eneath: (raised by the horn shaped cams E E.)

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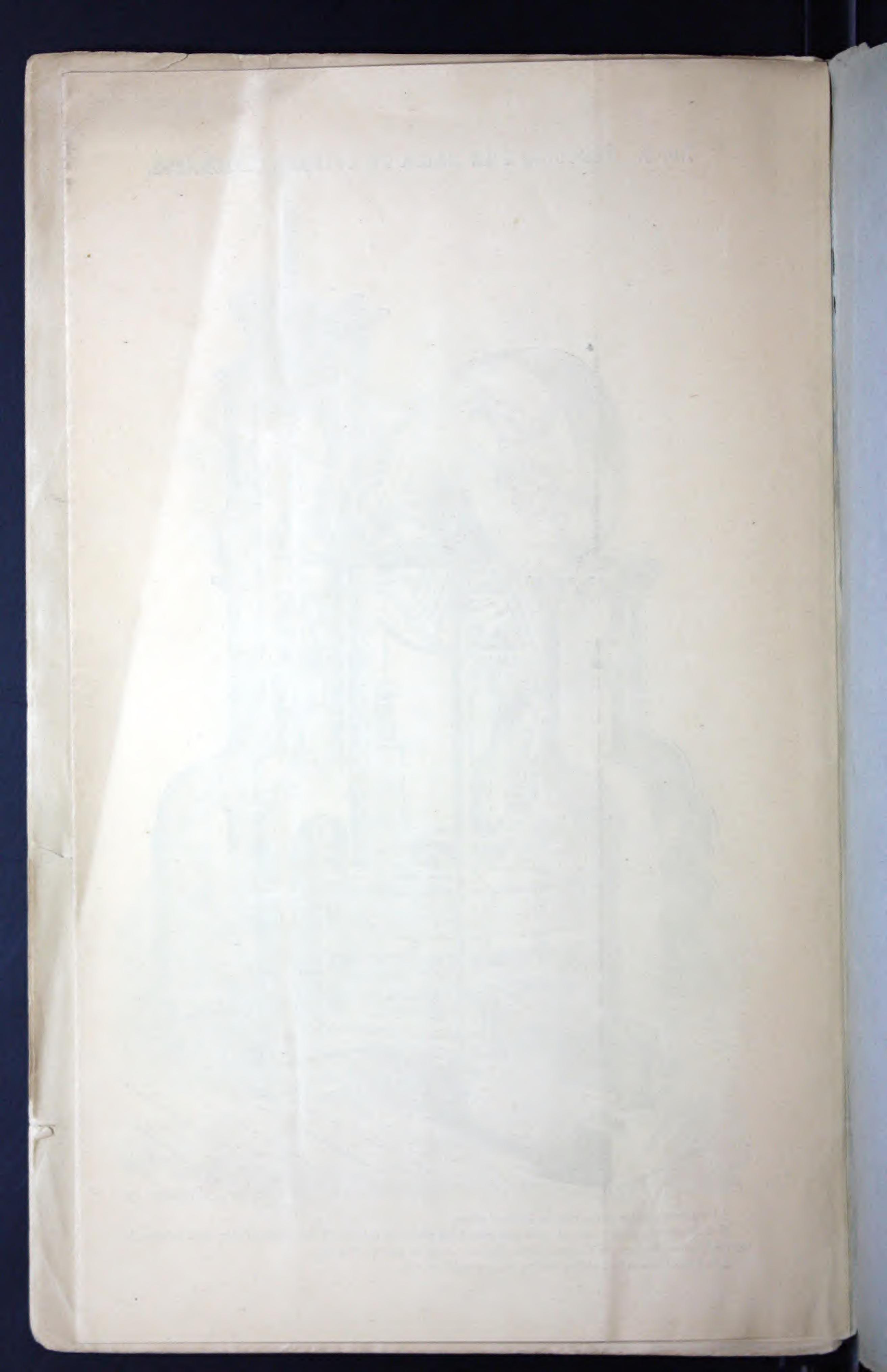
E E gives a sidere descending.

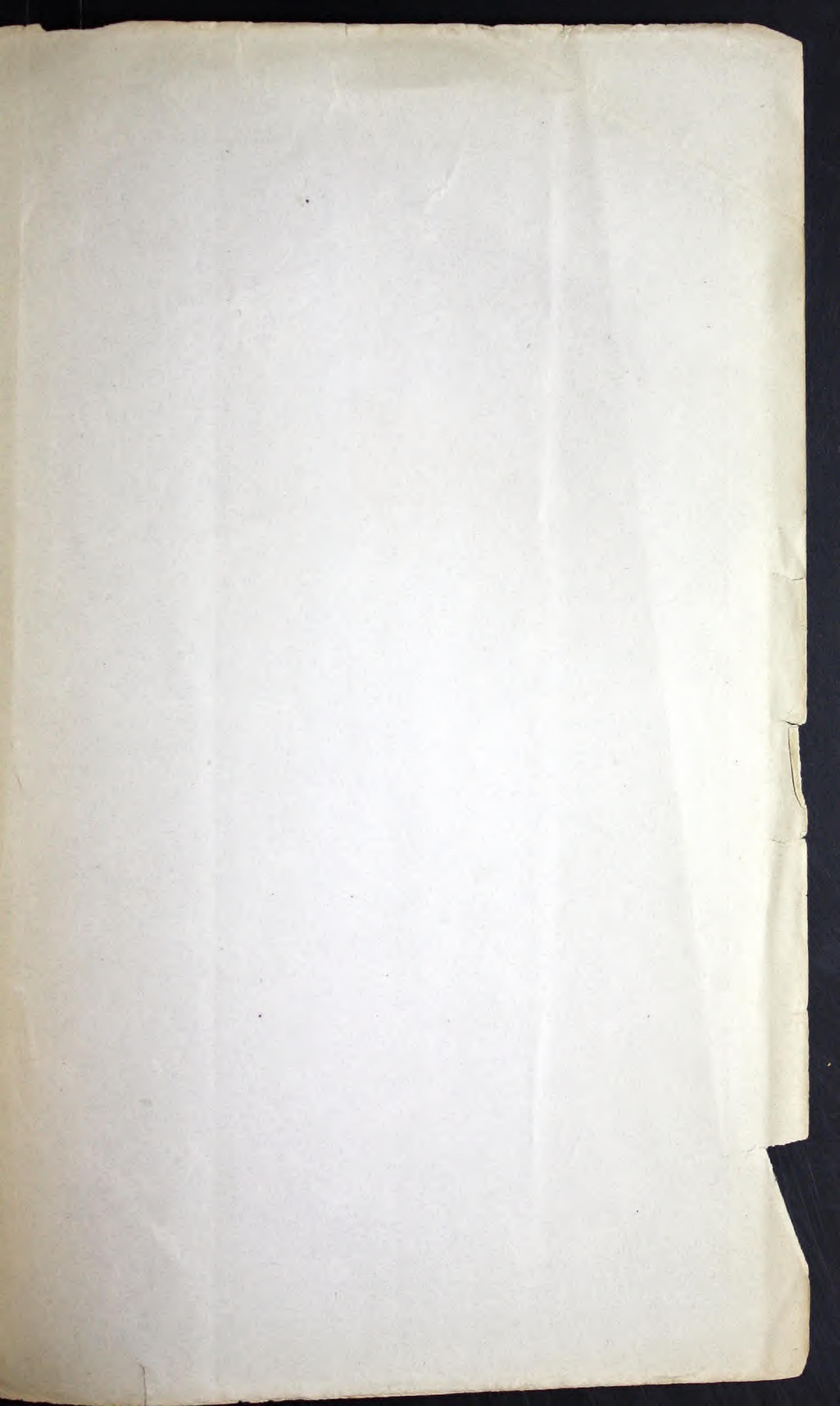
F Bar running leir gradual delivery of the bricks (Fig. 3) to the surface.

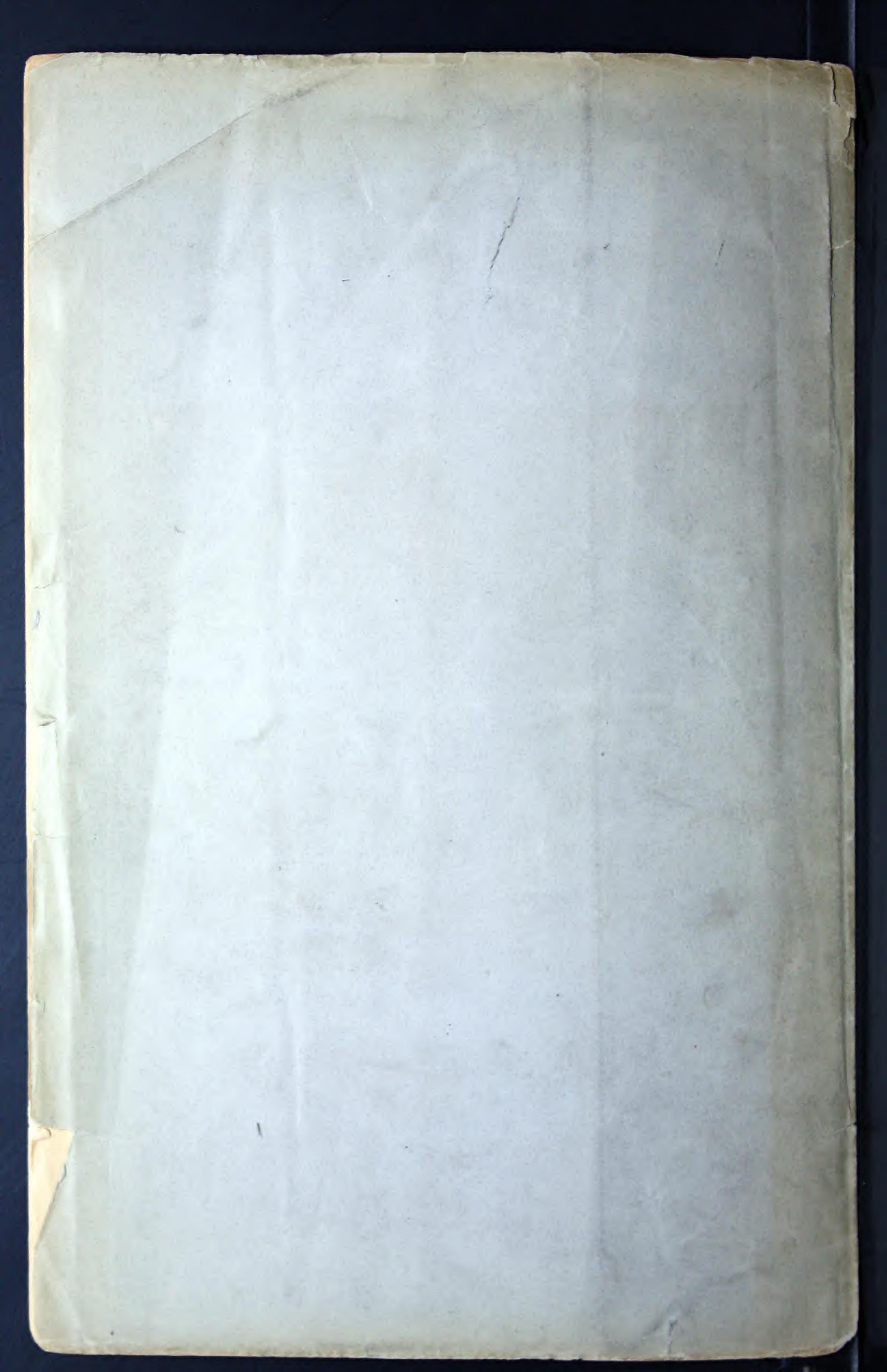
## No. 3. RE FINISHED BRICK.



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